

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte DIETMAR HUGLIN,  
JOACHIM F. RODING,  
ANDREAS W. SUPERSAXO, and  
HANS G. WEDER

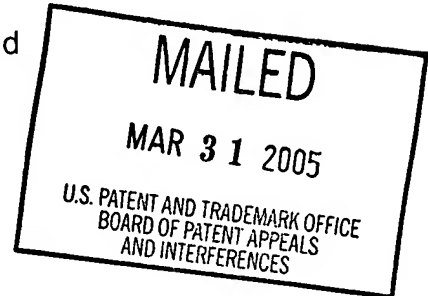
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Appeal No. 2004-1983  
Application No. 10/016,903

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ON BRIEF

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Before SCHEINER, ADAMS, and GRIMES, Administrative Patent Judges.<sup>1</sup>

Opinion by GRIMES, Administrative Patent Judge.

Dissenting opinion by ADAMS, Administrative Patent Judge.

REQUEST FOR REHEARING

Appellants request reconsideration (rehearing) of the Board's Decision entered November 24, 2004, in which the examiner's rejection of the appealed claims under 35 U.S.C. § 103 was affirmed. After reconsidering the evidence of record, we agree with Appellants that the initial decision in this case was based on a misinterpretation of the prior art. Appellants' request for rehearing is granted.

As reviewed in the decision mailed November 24, 2004, the claims on appeal are directed to a method for making a cosmetic formulation. In the claimed method, certain

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<sup>1</sup> The merits panel that issued the initial opinion in this case included Administrative Patent Judge Winters, who retired from the U.S. Patent and Trademark Office before Appellants filed their Request for

components are mixed in a first step (step  $\alpha$ ) "with conventional stirring apparatus until a homogeneous clear liquid is obtained"; in a second step (step  $\beta$ ), the liquid from step  $\alpha$  is added "to a water phase, wherein step ( $\beta$ ) is carried out in the absence of high shear or cavitation forces."

Appellants argue that the previous decision erred in concluding that the reference cited by the examiner teaches or suggests the limitation of a second mixing step that is carried out in the absence of high shear or cavitation forces:

With respect to a homomixer, EP '150 clearly talks about "stronger shearing force than a homomixer" (note the comparative term), which does not imply that a homomixer does not also apply a strong shearing force, or a high shear or cavitation force as excluded by the present claims['] language. On line 37 of page 4, EP '150 makes an effort to define the term "strong shearing force" in relation to the force applied by a homomixer. This only shows that the inventors of EP '150 have seen the need to define a specific range of shear force as "strong", obviously because this range, as explained in the document, may provide even better results. Naturally, this range, specifically defined for the needs of the subject matter of EP '150, is not necessarily identical with the range of shearing forces usually understood by one skill in the art as "strong".

Request for Rehearing, page 2.<sup>2</sup>

We have reviewed the prior art in light of Appellants' request. On reconsideration, we agree that the cited reference does not disclose and would not have suggested a process that includes a second mixing step carried out in the absence of high shear forces. Kakoki discloses that

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Rehearing. Administrative Patent Judge Grimes has replaced Administrative Patent Judge Winters on this merits panel. See In re Bose Corp., 772 F.2d 866, 227 USPQ 1 (Fed. Cir. 1985).

<sup>2</sup> Appellants' Request for Rehearing cites several pieces of evidence to support the position that a homomixer was understood by those skilled in the art to apply strong shearing forces. We have not considered the evidence that was newly cited or submitted in the Request for Rehearing, because Appellants have not presented "good and sufficient reasons" to explain why the evidence was not presented earlier. See 37 CFR § 41.33(d)(1) and (2).

a novel transparent composition can be obtained in which oily components are stably formulated with a small amount of a surfactant, to an extent such that there is no danger of irritation, by uniformly dispersing an amphiphilic substance such as lecithin and a small amount of a surfactant in water, and then subjecting the dispersion to a strong shearing force by, for example, an emulsifier capable of providing a shearing force, such as a homomixer.

Page 2, line 54, to page 3, line 4 (emphasis added).

Kakoki also expresses a preference for mixing methods that generate even stronger shearing forces than a homomixer. See page 4, lines 32-35 “[The composition] can be further improved when the mixture is treated in an emulsifier capable of providing a stronger shearing force than a conventional homomixer. Examples of such emulsifiers are the Manthon Gaulin, the French press, the colloid mill, the microfluidizer, and the sonication emulsifying machine.” Consistent with these preferences, in all of Kakoki’s working examples, emulsification is carried out using a homomixer or stronger treatment.

In contrast, the instant specification discloses that

Step ( $\beta$ ) is carried out by adding the liquid obtained in step ( $\alpha$ ), the nanodispersion pre-phase, to the water phase of the cosmetic end formulations. The particular choice of components (a), (b) and (c) results directly in ultrafine, monodisperse nanodispersions. In this case it is possible to forego homogenisation via nozzle, rotor-stator or ultrasound homogenisers, which is usually carried out to convert coarsely disperse or at least heterodisperse systems to fine monodisperse systems. Step ( $\beta$ ) is thus characterised by the absence of high shear or cavitation forces.

Page 2, last paragraph (emphases added). Consistent with this disclosure, all of the working examples in the specification include a second mixing step (i.e., step ( $\beta$ ) of the claimed method) which is carried out “with stirring (e.g. using a magnetic agitator).”

See pages 24-26.

On reconsideration of both the instant specification and the prior art, we think it is clear that the claimed method does not encompass a second step of mixing using a homomixer, which was recognized in the art as subjecting compositions to a strong shearing force. See, e.g., Kakoki, page 3, lines 1-4. We agree with Appellants that Kakoki teaches away from methods that do not include mixing using high shear forces (i.e., using a homomixer or even stronger treatments). Therefore, we agree that the cited reference would not have suggested the instantly claimed process to those of ordinary skill in the art.

Appellants' request for rehearing is granted. The rejection under 35 U.S.C. § 103 is reversed.

REHEARING GRANTED



Toni R. Scheiner  
Administrative Patent Judge



Eric Grimes  
Administrative Patent Judge

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ADAMS, Administrative Patent Judge, dissenting.

As I understand it, the only issue presented for our reconsideration is whether the recitation “absence of high shear” force, as it appears in step (β) of appellants’ claim 32, limits the scope of the claimed invention to preclude the use of a homomixer as taught by Kakoki. See e.g. Request for Rehearing, page 4. As explained in the Decision<sup>3</sup>

Applicants’ argument to the contrary, notwithstanding, we find that ... Kakoki does not equate the use of a homomixer with high shear mixing. Rather, as seen from the above-quoted passages, the reference draws a contrast between “a homomixer, conventionally used in the production of cosmetics” and “an emulsifier capable of providing a stronger shearing force than a conventional homomixer.” A “strong shearing force treatment,” according to the reference, means treatment using an emulsifier capable of providing a stronger or higher shearing force than a conventional homomixer. For example, a “strong shearing force treatment” is provided by Manthon Gaulin high-pressure homogenizer [or an ultrasonication emulsifier].

Apparently recognizing the lack of any evidentiary basis in this record to support the assertion that the phrase “absence of high shear” force excludes a homomixer, appellants attach several pieces of new evidence to their Request for Rehearing. I agree with the majority (see supra n. 2) that this new evidence should not be considered. Thus, there remains no evidence on this record to suggest that the phrase “absence of high shear” force excludes a homomixer. Accordingly, I dissent.

To make up for the lack of evidence in support of appellants’ arguments, the majority points out (supra, page 3), appellants’ specification discloses, “it is possible to forego homogenization via nozzle, rotor-stator or ultrasound homogenisers.” While the

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<sup>3</sup> Mailed November 24, 2004.

majority makes no attempt to establish a nexus between a homomixer and a “nozzle, rotor-stator or ultrasound”, the majority finds (id.), the use of a “magnetic agitator” in appellants’ examples are consistent with appellants’ disclosure (page 2, last paragraph, emphasis added) that “it is possible to forego homogenization via nozzle, rotor-stator or ultrasound homogenisers...” I recognize, however, that the majority stops short of stating that the scope of devices that can be used in step (β) of appellants’ claimed invention is limited to a “magnetic agitator.” Thus, the question becomes -- what is included within the scope of step (β)? While they make no effort to explore the scope of the phrase “absence of high shear ... force[ ]”, the majority is apparently of the opinion that the scope of this phrase includes mixing with devices that produce a shear force in the range of a magnetic agitator up to something less than, for example, an ultrasound homogenizer.

Interestingly enough, Kakoki teaches that a homomixer produces less shear force than an ultrasound homogenizer. According to Kakoki (page 4, lines 37-42, emphasis added), “[t]he ‘strong shearing force treatment’ used herein means the treatment in which an emulsifier capable of providing a stronger or higher shearing force than a mixer (e.g., a homomixer...) conventionally used in the production of cosmetics. Examples of such emulsifiers are ... an ultrasonication emulsifier.”

Nevertheless, the majority attempts to distinguish a homomixer from appellants’ claimed invention by finding (supra, pages 2-3), Kakoki teach that a dispersion is subjected “to a strong shearing force by, for example, an emulsifier capable of providing a shearing force, such as a homomixer”; and that “in all of Kakoki’s working examples,

emulsification is carried out using a homomixer or stronger treatment.” In my opinion, the majority distinction is based solely on Kakoki’s use of relative terminology in describing the shear force of one device as “strong” or “stronger” than another device. Appellants also recognize Kakoki’s use of relative terminology. According to appellants (Request for Rehearing, page 2), Kakoki “clearly talks about ‘stronger’ shearing force than a homomixer’ (note the comparative term), which does not imply that a homomixer does not also apply a strong shearing force, or a high shear ... force....” I note, however, that the comparative, or relative terminology also does not imply that a homomixer provides as high a shear force as a nozzle, rotor-stator or ultrasound homogenizer, which are the only devices identified by the majority that define the upper limit of the genus of devices that read on appellants’ claimed invention.

Unlike Kakoki<sup>4</sup>, appellants’ specification provides no disclosure of the devices, or the operating conditions of the devices that are included within the genus of devices that are capable of performing step (β) of their claimed invention. As discussed above, as the majority recognizes, the specification simply exemplifies a magnetic agitator and discloses in relative terms that the upper limit of devices capable of performing step (β) is a device that produces less shear force than a nozzle, rotor-stator or ultrasound homogenizer. As Kakoki teaches, a homomixer produces less shear force than an

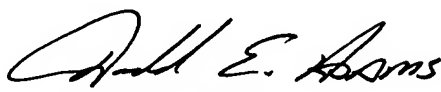
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<sup>4</sup> See Kakoki, page 4, lines 37-42:

The “strong shearing force treatment” used herein means the treatment in which an emulsifier capable of providing a stronger or higher shearing force than a mixer (e.g., a homomixer, Disper, a propeller type mixer) conventionally used in the production of cosmetics. Examples of such emulsifiers are a high pressure homogenizer ... preferably operating under a pressure of 500 psi or more, more preferably 2000 psi or more, a colloid mill preferably operating at 1000 rpm or more, more preferably 5000 rpm or more, or an ultrasonication emulsifier.

ultrasonic emulsifier. Kakoki, page 4, lines 37-42. On this record, there is no evidence that the use of a homomixer as taught by Kakoki is outside the scope of the claimed invention.

Therefore, I disagree with the majority's findings (supra, page 4), that (1) "Kakoki teaches away from methods that do not include mixing using high shear forces..."; and (2) Kakoki "would not have suggested the instantly claimed process to those of ordinary skill in the art." In my opinion, the evidence of record does not support these findings. Accordingly, I would deny appellants' Request for Rehearing.

  
Donald E. Adams  
Administrative Patent Judge

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Appeal No. 2004-1983  
Application No. 10/016,903

Page 9

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